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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,039	02/01/2001	Son Nguyen Kim	49320	7940

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KEIL & WEINKAUF
1350 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

FUBARA, BLESSING M

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 04/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,039

Applicant(s)

KIM ET AL.

Examiner

Blessing M. Fubara

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of paper number 5 filed 01/28/02.

1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-5, 7, 8 and 12-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 7, 8, 12, 14 and 15 provide for the use of polymers, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 7, 8, 12, 14 and 15 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claims 3-5 and 13 recite "and/or" and the claims are indefinite. See *Ex parte Anderegg* 51 USPQ 66.

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Claim Objections

5. Claims 10 and 11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 10 and 11 read like process or method claims and cannot depend from a composition claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peffly et al. (US 5,972,356).

Peffly discloses a personal care composition for hair styling. The composition comprises from about 0.01% to 20% of hair styling polymer, a polyorganosiloxane emulsion comprising a polyorganosiloxane dispersed as particles where the particles are about 150 nanometers in average diameters and a surfactant system; from about 0.01% to about 10% of a silicone-polyalkylene copolymer surfactant and a carrier. The carrier comprises at least 0.5% of a first solvent selected from the group consisting of water, water-soluble organic solvents, organic solvents that are strongly to moderately strong in hydrogen-bonding parameters and mixtures thereof. See abstract and column 2, lines 22-45.

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The hair styling polymer includes copolymers that have molecular weight from about 10,000 to about 1,000,000 which have a vinyl polymeric backbone moieties, the copolymer comprising about 15 to about 40% C monomers and components selected from the group consisting of about 5% to about 70% A monomers, about 10% to about 60% B monomers and mixtures thereof (column 4, lines 57-62 and column 7, lines 13-18). A is a vinyl monomer that can undergo free radical polymerization; B is a monomer that can polymerize with A (column 4, lines 63-67). A monomers include t-butyl methacrylate, 2-ethylhexyl methacrylate and methylmethacrylate and mixtures thereof (column 5, lines 61-64). B monomers include methacrylic acid, dimethylaminoethyl methacrylate, N-t-butyl acrylamide, vinyl pyrrolidone and vinyl caprolactam and mixtures thereof (column 5, line 65 to column 6 line 13).

Although Peffly does not teach the specific ranges of polymers recited in the application, the claimed ranges lie inside the ranges taught in the prior art. And where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. Therefore it is prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Peffly. One having ordinary skill in the art would have been motivated to prepare the cationic polymeric composition of Peffly. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Straub (EP 0 100 890) teaches a copolymer obtained by free radical copolymerization of an alkyl acrylate or methacrylate, water-soluble neutral nitrogen containing monomer, cation-group containing monomer and a 3 or 4 carbon unsaturated carboxylic acid. The polymer is obtained by free-radical copolymerization of 20-75% ethyl, n-butyl, tert-butyl or lauryl acrylate or methacrylate or mixtures thereof, 5-50% N-vinylpyrrolidone, N-vinylcaprolactam or mixture

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thereof, 1-25% n-vinylimidazole, 1-vinyl-2-methylimidazole or mixtures thereof and 1-25% of acrylic acid or methacrylic acid. The polymer has a K value of from 12-75 when measured in ethanol at 25 °C. The polymeric composition of Straub finds utility in hair sprays, fixatives, and auxiliaries in shampoos and setting compositions. See abstract. The claimed ranges lie inside the ranges taught in the prior art. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Potthoff-Karl et al (US 5,132,417) teaches a copolymer of tert butyl acrylate and/or tert-butyl methacrylate obtained by free radical polymerization of from 20-90% tert-butyl acrylate and /or tert-butyl methacrylate, from 10-60% N-vinylpyrrolidone and from 0-30% C1-C20- alkyl acrylate, C1-C20 alkyl methacrylate, a C2-C4-hydroxyalkyl methacrylate or vinyl acetate or mixtures thereof (abstract).

9. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is 703-308-8374. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Blessing Fubara
April 13, 2002


THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600